

Maximum Mach number variation during a run	the Mach number is adjustable at ± 0.001 ; during a continuous angle of attack variation the Mach number is not kept strictly constant and depends on model size and Mo .
3.6 Reynolds number range	
Unit Reynolds number range (give range at representative Mach numbers ; l/m)	Mo : 0.25 0.50 0.72 1. 1.35 $(Re/m)_{max} 10^{-6}$: 14 21 33 27 27
Means of varying Reynolds number (e.g., by pressurization)	stagnation pressure $Po = 0.3$ to 2.5 bar for $M \leq 0.7$ 0.3 to 1.75 bar for $M \geq 1$ 0.3 to 2.1 bar for $M = 0.8$ 0.3 to 1.9 bar for $M = 0.9$
3.7 Temperature range and dewpoint. Can temperature be controlled ?	stagnation temperature $To = 292 K \pm 5$ to $315 K \pm 5$ cannot be controlled humidity $< 0.2g H_2O / Kg$ air
3.8 Model attitudes	
3.8.1 Angle of attack, yaw, roll	motorization for the 3 angles up to 35° (for complete model)
Accuracy in determining angles	0.03 degree
3.9 Organization operating the tunnel and location of tunnel	ONERA - Centre de Modane-Avrievux
3.10 Who is to be contacted for additional information	ONERA - Direction GME - Châtillon - FRANCE
3.1 Literature concerning this facility	ref. 2, 3
3.12 Additional remarks	on line data return
4. <u>Tests</u>	
Type of tests	pressure distributions, aerodynamic forces and moments, flow studies by visualization (wall streamlines and boundary layer transition), unsteady measurements
Wing span or semispan to tunnel width	0.7
4.3 Test conditions	
Angle of attack	during pressure measurements : $\alpha_{max} \leq 14^\circ$ for all Mach numbers and $Re_c < 18 \times 10^6$ (for force measurements, because of the limited capacity of the balance, there is a large variation of α_{max} with M and Re)
4.3.2 Mach number	$0.27 < Mo < 1.33$
4.3.3 Dynamic pressure	$1600 < q_0 < 60700 N/m^2$
4.3.4 Reynolds number	$1.5 \times 10^6 < Re_c < 15 \times 10^6$
4.3.5 Stagnation temperature	$\sim 300 K$
4.6 Transition	
4.4.1 Free or fixed	free
4.4.2 Position of free transition	variable
4.4.3 Position of fixed transition, width of strips, size and type of roughness elements	not relevant
4.4.4 Were checks made to determine if transition occurred at trip locations ?	not relevant
Bending or torsion under load	
Describe any aeroelastic measurements made during tests	unsteady bending measured by strain-gauge on the wing root